==========

Sequence Listing was accepted.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2007; month=12; day=13; hr=9; min=25; sec=24; ms=252;]

==========

Validated By CRFValidator v 1.0.3

Application No: 10559406 Version No: 1.0

Input Set:

Output Set:

Started: 2007-11-21 08:28:40.308
Finished: 2007-11-21 08:28:42.769
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 461 ms
Total Warnings: 15
Total Errors: 5
No. of SeqIDs Defined: 15
Actual SeqID Count: 15

Error code		Error Description
W	213	Artificial or Unknown found in <213> in SEQ ID (1)
W	213	Artificial or Unknown found in <213> in SEQ ID (2)
W	213	Artificial or Unknown found in <213> in SEQ ID (3)
W	213	Artificial or Unknown found in <213> in SEQ ID (4)
W	402	Undefined organism found in <213> in SEQ ID (5)
W	402	Undefined organism found in <213> in SEQ ID (6)
W	402	Undefined organism found in <213> in SEQ ID (7)
W	402	Undefined organism found in <213> in SEQ ID (8)
W	402	Undefined organism found in <213> in SEQ ID (9)
W	402	Undefined organism found in <213> in SEQ ID (10)
W	402	Undefined organism found in <213> in SEQ ID (11)
E	323	Invalid/missing amino acid numbering SEQID (11) POS (37)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (11)
E	323	Invalid/missing amino acid numbering SEQID (11) POS (65)
W	213	Artificial or Unknown found in <213> in SEQ ID (12)
W	213	Artificial or Unknown found in <213> in SEQ ID (13)
W	213	Artificial or Unknown found in <213> in SEQ ID (14)
W	213	Artificial or Unknown found in <213> in SEQ ID (15)
E	323	Invalid/missing amino acid numbering SEQID (15)at Protein (11)

Sequence Listing

<110> Universitaet Leipzig

<120> Method and Means for the Determination of Defined States or Modifications in the Mucus of the Uterus or in the Epithelium of Other Organs

<130> 401P07PCT-US

<140> 10559406
<141> 2007-11-21

<150> PCT/DE04/01210
<151> 2004-06-04

<150> DE10325639.3
<151> 2003-06-06

<150> DE10325638.5
<151> 2003-06-06

<160> 15

<210> 1
<211> 15
<212> PRT
<213> artificial
<220>
<223> Epitope e-beta-9 (e-beta-hCG)
<400> 1

Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala
1 5 10 15

<210> 2
<211> 15
<212> PRT
<213> artificial
<220>
<223> Epitope beta-9 (t?hCG)
<400> 2

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala
1 5 10 15

<210> 3
<211> 15
<212> PRT
<213> artificial
<220>
<223> Epitope e-beta-1 (e-beta-hCG)

<400> 3

Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr
1 5 10 15

<210> 4
<211> 15
<212> PRT
<213> artificial
<220>
<223> Epitope beta-1 (t-beta-hCG)
<400> 4

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr
1 5 10 15

<210> 5
<211> 861
<212> DNA
<213> human
<220>
<223> beta-hCG beta-7 cDNA-Sequenz
<400> 5

agcactttcc tcgggtcacg gcctcctcct ggttcccaag accccaccat aggcagaggc 60
aggccttcct acaccctact ctctgtgcct ccagcctcga ctagtcccta gcactcgacg 120
actgagtctc agaggtcact tcaccgtggt ctccgcctca tccttggcgc tagaccactg 180
aggggagagg actggggtgc tccgctgagc cactcctgtg cctccctggc cttgtctact 240
tctcgccccc cgaagggtta gtgtccagct cactccagca tcctacaacc tcctggtggc 300
cttgacgccc ccacaaaccc gaggtataaa gccaggtaca ccaggcaggg gacgcaccaa 360
ggatggagat gttccagggg ctgctgctgt tgctgctgct gagcatgggc gggacatggg 420
catccaagga gatgcttcgg ccacggtgcc gccccatcaa tgccaccctg gctgtggaga 480
aggagggctg ccccgtgtgc atcaccgtca acaccaccat ctgtgccggc tactgcccca 540
ccatgacccg cgtgctgcag ggggtcctgc cggccctgcc tcaggtggtg tgcaactacc 600

gcgatgtgcg cttcgagtcc atccggctcc ctggctgccc gcgcggcgtg aaccccgtgg 660
tctcctacgc cgtggctctc agctgtcaat gtgcactctg ccgccgcagc accactgact 720
gcgggggtcc caaggaccac cccttgacct gtgatgaccc ccgcttccag gcctcctctt 780
cctcaaaggc ccctcccccc agccttccaa gtccatcccg actcccgggg ccctcggaca 840
ccccgatcct cccacaataa a 861

<210> 6
<211> 861
<212> DNA
<213> human
<220>
<223> beta-hCG beta-6 cDNA-Sequenz
<400> 6

agcactttcc tcgggtcacg gcctcctcct ggttcccaag accccaccat aggcagaggc 60
aggccttcct acaccctact ctctgtgcct ccagcctcga ctagtcccta acactcgacg 120
actgagtctc agaggtcact tcaccgtggt ctccgcctca tccttggcgc tagaccactg 180

aggggagagg actggggtgc tccgctgagc cactcctgtg cctccctggc cttgtctact 240
tctcgccccc cgaagggtta gtgtcgagct cactccagca tcctacaacc tcctggtggc 300
cttgccgccc ccacaacccc gaggtatgaa gccaggtaca ccaggcaggg gacgcaccaa 360
ggatggagat gttccagggg ctgctgctgt tgctgctgct gagcatgggc gggacatggg 420
catccaagga gccacttcgg ccacggtgcc gccccatcaa tgccaccctg gctgtggaga 480
aggagggctg ccccgtgtgc atcaccgtca acaccaccat ctgtgccggc tactgcccca 540
ccatgacccg cgtgctgcag ggggtcctgc cggccctgcc tcaggtggtg tgcaactacc 600

gcgatgtgcg cttcgagtcc atccggctcc ctggctgccc gcgcggcgtg aaccccgtgg 660
tctcctacgc cgtggctctc agctgtcaat gtgcactctg ccgccgcagc accactgact 720
gcgggggtcc caaggaccac cccttgacct gtgatgaccc ccgcttccag gcctcctctt 780
cctcaaaggc ccctcccccc agccttccaa gtccatcccg actcccgggg ccctcggaca 840
ccccgatcct cccacaataa a   861

<210> 7
<211> 861
<212> DNA
<213> human
<220>
<223> e-beta-hCG ("endo" beta-6e) cDNA-Sequenz
<400> 7

agcactttyc tcgggtcacg gcctcctcct ggttcccaag accccaccat aggcagaggc   60
aggccttcct acaccctact ctctgtgcct ccagcctcga ctagtcccta rcactcgacg 120
actgagtctc agaggtcact tcaccgtggt ctccgcctca tccttggygc tagaccactg 180
aggggagagg actggggtgc tccgctgagc cactcctgtg cctccctggc cttgtctact 240
tctcgccccc cgaagggtta gtgtcsagct cactccagca tcctacaacc tcctggtggc 300
cttgmcgccc ccacaamccc gaggtatraa gccaggtaca ccaggcaggg gacgcaccaa 360
ggatggagat gttccagggg ctgctgctgt tgctgctgct gagcatgggc gggacatggg 420
catccargga gmyrcttcgg ccacggtgcc gccccatcaa tgccaccctg gctgtggaga 480
aggagggctg ccccgtgtgc atcaccgtca acaccaccat ctgtgccggc tactgcccca 540
ccatgacccg cgtgctgcag ggggtcctgc cggccctgcc tcaggtggtg tgcaactacc 600

gcgatgtgcg cttcgagtcc atccggctcc ctggctgccc gcgcggcgtg aaccccgtgg 660
tctcctacgc cgtggctctc agctgtcaat gtgcactctg ccgccgcagc accactgact 720
gcgggggtcc caaggaccac cccttgacct gtgatgaccc ccgcttccag gcctcctctt 780
cctcaaaggc ccctcccccc agccttccaa gtccatcccg actcccgggg ccctcggaca 840
ccccgatcct cccacaataa a   861

<210> 8
<211> 165
<212> PRT
<213> human
<220>
<223> t-beta-hCG beta-5,beta-8,beta-3(prehormone)
<400> 8

Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
-20   -15   -10   -5

Gly Thr Trp Ala Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile
             -1   1   5   10

```
Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
        15                  20                  25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
    30                  35                  40

Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
45                  50                  55                  60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
                65                  70                  75

Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
            80                  85                  90

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
        95                  100                 105

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro
    110                 115                 120

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
125                 130                 135                 140


Pro Ile Leu Pro Gln
                145
```

<210> 9
<211> 165
<212> PRT
<213> human
<220>
<223> beta-hCG beta-7 (prehormone)
<400> 9

```
Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
-20                 -15                 -10                 -5


Gly Thr Trp Ala Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile
             -1   1               5                  10

Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
        15                  20                  25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
    30                  35                  40

Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
45                  50                  55                  60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
```

```
                65                  70                  75

Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
            80                  85                  90

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
        95                  100                 105

Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala Pro
    110                 115                 120

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
125                 130                 135                 140


Pro Ile Leu Pro Gln
                145

<210>  10
<211>  165
<212>  PRT
<213>  human
<220>
<223>  e-beta-hCG beta-6e (with Arg in Pos 2) (prehormone)
<400>  10


Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
-20                 -15                 -10                  -5


Gly Thr Trp Ala Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile
             -1   1               5                  10

Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
        15                  20                  25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
    30                  35                  40

Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
45                  50                  55                  60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
                65                  70                  75

Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
            80                  85                  90

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
        95                  100                 105

Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala Pro
    110                 115                 120

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
125                 130                 135                 140
```

```
Pro Ile Leu Pro Gln
                145
```

<210> 11
<211> 141
<212> PRT
<213> human
>220>
<223> beta-LH beta-4 (prehormone)
<400> 11

```
Met Glu Met Leu Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
-20                 -15                 -10                  -5

Gly Ala Trp Ala Ser Arg Glu Pro Leu Arg Pro Trp Cys His Pro Ile
             -1  +1                5                  10

Asn Ala Ile Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
                15                  20                  25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val

     30                  35                  40

Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val Cys Thr Tyr Arg
 45                  50                  55                  60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
                 65                  70                  75

Asp Pro Val Val Ser Phe Pro Val Ala Leu Ser Cys Arg Cys Ala Pro
             80                  85                  90

Cys Arg Arg Ser Thr Ser Asp Cys Gly Gly Pro Lys Asp His Pro Leu
         95                  100                 105

Thr Cys Asp His Pro Glu Leu Ser Gly Leu Leu Phe Leu
    110                 115
```

<210> 12
<211> 10
<212> PRT
<213> artificial
<220>
<223> Peptide P1 (e-beta-hCG)
<400> 12

```
Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser
```

1 5 10

<210> 13
<211> 10
<212> PRT
<213> artificial
<220>
<223> Peptide K1 (t-beta-hCG)
<400> 13

Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser
1 5 10

<210> 14
<211> 11
<212> PRT
<213> artificial
<220>
<223> Peptide P2 (e-beta-hCG)
<400> 14

Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro
1 5 10

<210> 15
<211> 11
<212> PRT
<213> artificial
<220>
<223> Peptide K2 (t-beta-hCG)
<400> 15

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro
1 5 10 11